5   <u>I claim:</u>

1.   A method for representing digital content, comprising

         receiving a source of data representative of the digital content,

         processing the source of data to identify objects that occur within the source,

         for each object, creating a document object that represents an internal representation of

10   the encountered object and that separates the structure of the object from the data content of the

         object,

         organizing the document objects into a document structure that represents the structure of

         the digital content,

         organizing the data content of the objects into a data content structure, and

15   providing a set of pointers that associate the document objects within the document

         structure with the data content stored in the data content structure.

2.   A method according to claim 1, further including creating an indirection list that stores

         the set of pointers that associate the document objects with the data content.

3.   A method according to claim 1, wherein receiving a source of data comprises receiving a

20   stream of data generated from an application program.

4.   A method according to claim 1, wherein receiving a source of data comprises receiving a

         stream of data generated from streaming data from an application program.

5.   A method according to claim 1, wherein receiving a source of data comprises receiving a

         stream of data from a peripheral device.

25   6.   A method according to claim 1, wherein receiving a source of data comprise receiving a

         stream of data from a plurality of sources of data.

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7.   A method according to claim 6, further comprising
      merging document objects found in a first source of data and a second source of data for
building a composite document structure.

8.   A method according to claim 1, wherein organizing the document objects into a
document structure that represents the structure of the digital content, includes filtering the
document objects to select a sub set of document objects for the document structure.

9.   A method according to claim 1, wherein organizing the document objects into a
document structure that represents the structure of the digital content, includes organizing the
document objects into an arrangement that differs from the structure of the source of data.

10.   A method according to claim 1, wherein organizing the document objects into a
document structure that represents the structure of the digital content, includes adding document
objects to alter the structure of the digital content.

11.   A method according to claim 1, wherein organizing the data content of the objects into a
data content structure, includes filtering content to select content for the internal representation.

12.   A method according to claim 1, wherein organizing the data content of the objects into a
data content structure, includes adding content to select content for the internal representation.

13.   A method according to claim 1, further including processing the pointers to rearrange the
association between the data content and the document objects, whereby data content from one
source may be substituted with data content from another source.

14.   A method according to claim 1, further comprising a process for compacting document
objects stored in an internal representation by combining document objects having similar
attributes.

15.   A method according to claim 1, further including, building a resource table for storing
identified within a source of data.

16. A method according to claim 15, wherein the resources include resources selected from the group consisting of fonts, color lists, styles and links.

17. A method according to claim 1, including a data delivery process wherein the data content can be stored or delivered independently from the document structure.

18. A method according to claim 1, including a compression process for compressing the data content.

19. A method according to claim 1, including an encoding process for encoding the data content.

20. A method according to claim 1, including a compression process for compressing the document structure.

21. A method according to claim 1, including an encoding process for encoding the document structure.

22. A method according to claim 1, wherein a document object may include position information representative of a position of content within a document.

23. A method according to claim 22 wherein the position information may be relative or fixed position information.

24. A method according to claim 1, wherein a document structure defines position information representative of the location of an object relative to other objects in a document structure.

25. A method according to claim 1, wherein the document structure includes document objects having a set of defined parameters including dimensional, temporal and physical.

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26.　A method according to claim 25, wherein a visual position for content in an internal representation is tracked separately from a structural position of that content in a document.

27.　A method according to claim 1, wherein the digital content includes content selected from the group consisting of text, graphic, audio, video, interactive, script and audio-visual.

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28.　A method according to claim 1, further comprising a process for exporting digital content.

29.　A method according to claim 28, wherein the process for exporting digital content includes a process for exporting digital content in a format representative of the internal representation.

15　30.　A method according to claim 28, wherein the process for exporting digital content includes a process for exporting content in a format compatible with a selected known file format.

31　A method according to claim 29, wherein the format representative of the internal representation may be based on a structure selected from the group consisting of a binary data structure, a textual description, a marked-up text description, and a luminance/chrominance colour model.

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32　A method according to claim 29, wherein the format representative of the internal representation may be based on a universal text encoding model including an encoding selected from the group consisting of Unicode, shift-mapping and big-5.

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33.　A computer readable medium having stored thereon instructions for a method for representing digital content, comprising
　　　　receiving a source of data representative of the digital content,

5   processing the source of data to identify objects that occur within the source,

for each object, creating a document object that represents an internal representation of the encountered object and that separates the structure of the object from the data content of the object,

organizing the document objects into a document structure that represents the structure of 10   the digital content,

organizing the data content of the objects into a data content structure, and

providing a set of pointers that associate the document objects within the document structure with the data content stored in the data content structure.

34.   A system for representing digital content, comprising

15   an input mechanism for receiving a source of data representative of the digital content,

a document agent for processing the source of data to identify objects that occur within the source, and for creating a document object that represents an internal representation of an encountered object and that separates the structure of the object from the data content of the object, and for organizing the document objects into a document structure that represents the 20   structure of the digital content, and for organizing the data content of the objects into a data content structure, and

providing a set of pointers that associate the document objects within the document structure with the data content stored in the data content structure.

35.   A system according to claim 34, including a plurality of document agents, each being 25   capable of understanding a file format of a respective type of source of data.

36.   A system according to claim 34, including a document agent capable of understanding a plurality of file formats.

37.   A system according to claim 24, further comprising a set of object types representative of 30   types of content that are present in a source of data.

38.   A system according to claim 34, wherein the document agent identifies a file format from

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5   processing a characteristic selected from the group consisting of file content, file name, network
     type, transport mechanism, and disc type.

     39.   A method according to claim 37, wherein the set of objects types include a bitmap object
     type, a vector graphic object type, video type, animation type, button type, script and a text object
10   type.